



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6

**1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733**

March 9, 2015

Texas Department of Transportation
Director of Project Development
P.O. Box 1386
Houston, TX 77251-1386

Dear Mr. Henry:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Texas Department of Transportation (TXDOT) Draft Environmental Impact Statement (DEIS) for the State Highway 249 Extension (SH249). The purpose of this DEIS is to evaluate the social, economic, and environmental effects of the proposed SH249 tollway.

EPA's review identified a number of potential adverse impacts to aquatic resources, threatened and endangered species, archeological resources, and wetlands. In addition, the DEIS does not contain enough information to fully consider aquatic resources, noise, threatened and endangered species, historical and archeological resources, wetlands, indirect and cumulative effects, and greenhouse gas emissions. For these reasons we have rated the DEIS as "Environmental Concerns – Insufficient Information" (EC-2). The EPA's Rating System Criteria can be found at <http://www.epa.gov/compliance/nepa/comments/ratings.html>. EPA requests that these issues be addressed prior to releasing the Final EIS (FEIS). We have enclosed detailed comments which clarify our concerns.

EPA appreciates the opportunity to review the DEIS. Please send our office one copy of the FEIS when it is electronically filed. This letter will be published on the EPA website, <http://www.epa.gov/compliance/nepa/eisdata.html>, according to our responsibility under Section 309 of the CAA to inform the public of our views on the proposed Federal action. If you have any questions or concerns, I can be reached at stucky.marie@epa.gov or 214-665-7560, or contact Keith Hayden of my staff at hayden.keith@epa.gov or 214-665-2133.

Sincerely,

A handwritten signature in dark ink, appearing to read "Marie Stucky", is written over a faint, circular official stamp.

Marie Stucky
Chief, Office of Planning
and Coordination

Enclosure

**DETAILED COMMENTS ON THE
TEXAS DEPARTMENT OF TRANSPORTATION
DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE STATE HIGHWAY 249 EXTENSION**

BACKGROUND: The proposed SH 249 controlled-access tollway extension project would extend from just south of the State Highway (SH) 249/Farm-to-Market (FM) 1774/FM 149 interchange in the City of Pinehurst to a new SH 249/FM 1774 interchange north of the City of Todd Mission. The proposed SH 249 Extension would be developed on a new location and would be approximately 14 to 15 miles in length. It would cross the southwest portion of Montgomery County and extend into the southeast portion of Grimes County.

DISPLACEMENTS

Table 4-5, on page 4-8, indicates 2 residential houses will potentially be displaced, while table 4-6, on page 4-12 indicates 6 residences that will be displaced.

Recommendation: Clarify how many residential displacements will occur as a result of the project. Discuss the reason for the displacement, such as, construction of the road, noise, or other factor.

Per the DEIS, all communities near the SH 249 Extension will be impacted. There will be displaced and relocated residents as well as the Believers Fellowship Baptist Church and school that will be impacted.

Recommendation: There should be a continuous communication and public participation plan for this project that includes town hall meetings and listening sessions in regards to impacts to the parks, homes, churches, etc. Submit the public participation plan to EPA for review.

NOISE

Page 4-47 of the DEIS states "Before any abatement measure can be proposed for incorporation into the project, it must be both feasible and reasonable. In order to be "feasible," the abatement measure must be able to reduce the noise level at an impacted receptor by at least 5 dB(A) at greater than 50 percent of first row impacted receivers, and to be "reasonable," it must not exceed the cost-effectiveness criterion of \$25,000 for each receiver that would benefit by a reduction of at least 5 dB(A) and at least one first row receiver must achieve the noise reduction design goal of at least 7 dB(A)". Page ES-9 states noise barriers would only be feasible and reasonable for 66 impacted receivers under Alternative Alignment B/C. What is not stated is what will occur for the residential noise sensitive receptors (NSR) who will be impacted by traffic noise as a result of the tollway, for which noise abatement was not deemed feasible or

reasonable. There are 19 residential NSR's identified in table 4-16 that will be affected by the tollway. Some of the residences will experience increases of 20 dB(A) or more. Information on displacements and potential buyouts of adversely affected residences is lacking in the DEIS.

Recommendation: Please clarify exactly what will happen to the 19 residences adversely affected by noise, for which no abatement or mitigation is proposed. Are they included in displacement or buyout totals? Explain any methods used to compensate the residences for their loss in property values.

THREATENED AND ENDANGERED SPECIES

Pages 4-59 through 4-62 detail potential impacts to threatened and endangered species (T&E). There has currently been minimal field surveys conducted to determine impacts to T&E species. For T&E species determinations other than "no impact"; consultation with the United States Fish and Wildlife Service (USFWS) is required.

Recommendation: Complete consultation with the USFWS on any T&E species that has not previously received a "no effect" determination. For state listed T&E species complete consultation with the Texas Parks and Wildlife Department (TPWD). EPA requests this consultation be completed prior to the release of the FEIS.

ARCHEOLOGICAL, CULTURAL, AND HISTORICAL RESOURCES

Several areas of the DEIS indicate the potential to discover archeological resources as "high". Page 4-65 indicates there is potential for 2 or more archeological resources to occur in the project area. Appendix E contains several recommendations for identification and protection of archeological, cultural, and historical resources.

Recommendation: Continue to consult with the Texas State Historic Preservation Officer (SHPO) to determine and prevent impacts to archeological, cultural, and historical resources. Also, identify specific tribes to consult for potential impacts to tribal resources, or areas where tribes were historically present. EPA recommends adhering to all recommendations made in the constraints analysis in Appendix E. EPA requests this consultation be completed prior to the release of the FEIS.

GREENHOUSE GASES AND CLIMATE CHANGE

Climate change and Greenhouse gas (GHG) were not mentioned or analyzed in the DEIS.

Recommendation: EPA recommends that climate change issues be analyzed consistent with the Council on Environmental Quality's (CEQ) December 2014 revised draft guidance for Federal agencies' consideration of GHG emissions and climate change impacts when conducting environmental reviews under NEPA. Accordingly, we

recommend the FEIS include an estimate of the GHG emissions associated with the project, qualitatively describe relevant climate change impacts, and analyze reasonable alternatives and/or practicable mitigation measures to reduce project-related GHG emissions. More specifics on those elements are provided below. In addition, we recommend that the NEPA analysis address the appropriateness of considering changes to the design of the proposal to incorporate GHG reduction measures and resilience to foreseeable climate change. The FEIS should make clear whether commitments have been made to ensure implementation of design or other measures to reduce GHG emissions or to adapt to climate change impacts.

Include in the “Affected Environment” section of the FEIS a summary discussion of climate change and ongoing and reasonably foreseeable climate change impacts relevant to the project, based on U.S. Global Change Research Program¹ assessments, to assist with identification of potential project impacts that may be exacerbated by climate change and to inform consideration of measures to adapt to climate change impacts.

Estimate the GHG emissions associated with the proposal and its alternatives. Example tools for estimating and quantifying GHG emissions can be found on CEQ’s NEPA.gov website². For actions which are likely to have less than 25,000 metric tons of CO₂-e emissions/year, provide a qualitative estimate unless quantification is easily accomplished.³

The estimated GHG emissions can serve as a reasonable proxy for climate change impacts when comparing the proposal and alternatives. In disclosing the potential impacts of the proposal and reasonable alternatives, consideration should be given to whether and to what extent the impacts may be exacerbated by expected climate change in the action area, as discussed in the “affected environment” section.

Describe measures to reduce GHG emissions associated with the project, including reasonable alternatives or other practicable mitigation opportunities and disclose the estimated GHG reductions associated with such measures. The alternatives analysis should, as appropriate, consider practicable changes to the proposal to make it more resilient to anticipated climate change. EPA further recommends that the FEIS commits to implementation of reasonable mitigation measures that would reduce or eliminate project-related GHG emissions.

¹ <http://www.globalchange.gov/>

² https://ceq.doe.gov/current_developments/GHG_accounting_methods_7Jan2015.html

³ Recognizing that climate impacts are not attributable to any single action, but are exacerbated by a series of smaller decisions, we do not recommend comparing GHG emissions from a proposed action to global emissions. As noted by the CEQ revised draft guidance, “[t]his approach does not reveal anything beyond the nature of the climate change challenge itself: [t]he fact that diverse individual sources of emissions each make relatively small additions to global atmospheric GHG concentrations that collectively have huge impact.”

WETLANDS, WATERS OF THE U.S., AND VEGETATION

Field Surveys and Functional Assessments

Statements made in Section 3.9 conflict with statements made in the Executive Summary (ES), section 3.9.2. The ES indicates that field surveys have not yet been conducted, and that analysis so far has been based on National Wetland Inventory (NWI) maps. However, in this section there is a reference to field site visits for the purpose of preliminary jurisdictional determination. While this statement raises questions regarding consistency, overall, the indication seems to be that field site visits either did not occur, or were very limited, and if they did occur, no field site data has been provided. Rather than relying on NWI maps, actual field surveys should have been conducted for wetlands and stream crossings being proposed. Wetlands and other waters of the U.S. (WUS) that would be impacted by each alternative should have been described and mapped, and photographs provided. Functional assessment of wetlands and other WUS that would be impacted, should have been conducted and provided for review. Although stream crossings may constitute a majority of the proposed projects impacts to WUS; there is no description of stream habitat that would be impacted.

Recommendation: Conduct field surveys and functional assessment of wetlands and other waters of the U.S. that would be impacted by the various alternatives being considered, and especially the preferred alternative, as soon as possible, and provide results in the FEIS. Provide maps, descriptions, photographs, data, etc.

Statements made in the ES section 3.11.1 indicate field surveys to identify and quantify impacts to special habitat features, including bottomland hardwoods and riparian areas, have not been conducted. Field surveys should have been conducted previously and the results included in this DEIS.

Recommendation: Conduct field surveys to identify and quantify impacts to special habitat features, including bottomland hardwoods and riparian areas, as soon as possible, and include the results in the FEIS.

Jurisdictional Determination/Wetland Delineation; Section 3.10.1 and 4.9.2

Jurisdictional determination/wetland delineation should have been conducted and results provided as part of the DEIS. Somewhat conflicting statements regarding whether or not jurisdictional determination/wetland delineation has been conducted or not, exist in several places in the document.

Recommendation: Clarify whether or not preliminary jurisdictional determination/wetland delineation has been conducted. If not, complete draft jurisdictional determination/wetland delineation and provide the results in the FEIS.

Mitigation Plan; Section 3.9 and 4.9.2

A draft mitigation plan for impacts to wetlands and other waters of the U.S. should have been provided as part of the DEIS for review and comment.

Recommendation: If an alternative that completely avoids impacts to wetlands and other waters of the U.S. cannot be considered, then we recommend a draft mitigation plan to compensate for impacts to wetlands and other waters of the U.S. be completed and provided in the FEIS.

Indirect and Cumulative Impacts; Section ES-4, 5.7.3, and 6.3.3

Indirect effects associated with the proposed SH 249 Extension would include encroachment alteration effects to wetlands and other waters of the U.S. The DEIS appears to reflect an underestimation of the impacts of future jurisdictional wetland and stream impacts due to induced development. The DEIS assumes that all impacts to jurisdictional wetlands and streams will be fully mitigated for. Also, the DEIS appears to downplay the significance of cumulative impacts on wetlands and other waters of the U.S. in the Houston area in general, as well as in the project area.

Recommendation: Revise the text to explicitly state that indirect effects of the proposed project include encroachment alteration and induced development effects to wetlands and other waters of the U.S. Acknowledge that the potential cumulative impacts due to continued urbanization of this area include impacts to wetlands and other waters of the U.S.

ALTERNATIVES ANALYSIS

While we realize there are numerous factors and criteria to take into consideration in the development and analysis of alternatives for a project such as this, it appears that the selection of the study area, and all alternatives considered, did not include consideration of areas farther away from the Mill Creek floodplain, where there might be fewer wetlands and streams that would be impacted.

Recommendation: Consider expanding the study area to include areas away from Mill Creek and its tributaries, or add additional alternative alignments in this area away from Mill Creek. If necessary, revise this section to incorporate changes to impacts to wetlands and other waters of the U.S. (e.g. Mill Creek and tributaries) as a result of additional alternatives.

CONSULTATION AND COORDINATION

Coordination with several local, state, and national agencies concerning environmental laws and executive orders is ongoing. There are also a number of permits referenced in the DEIS that will need to be acquired prior to project construction commencing.

Recommendation: EPA recommends that TXDOT include all correspondence with resource agencies mentioned in the DEIS in a dedicated section or appendix of the FEIS, and not release the FEIS until all consultations required for the project have been completed.